CITY OF STOCKTON
Richard E. Nosky, Jr., Esq. (SBN 130726)
City Attorney
John Luebberke, Esq. (SBN 164893)
Assistant City Attorney
425 N. El Dorado Street
Stockton, CA 95202-1997
Telephone: (209) 937-8009
Facsimile: (209) 937-8898

SOMACH SIMMONS & DUNN
A Professional Corporation
Paul S. Simmons, Esq. (SBN 127920)
Theresa A. Dunham, Esq. (SBN 187644)
813 Sixth Street, Third Floor
Sacramento, CA 95814-2403
Telephone: (916) 446-7979
Facsimile: (916) 446-8199

Attorneys for Petitioner
CITY OF STOCKTON

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Received
Office Of The
Chief Counsel

SOMACH SIMMONS & DUNN
A Professional Corporation

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of City of Stockton's Petition for Review of Action and Failure to Act by the California Regional Water Quality Control Board, Central Valley Region, in Adopting Waste Discharge Requirements for City of Stockton Regional Wastewater Control Facility, Order No. R5-2008-0154 (NPDES No. CA0079138).	SWRCB/OCC File _____ CITY OF STOCKTON'S PETITION FOR REVIEW; PRELIMINARY STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF PETITION (Wat. Code, § 13320)

The City of Stockton (City or Petitioner), in accordance with section 13320 of the Water Code, hereby petitions for review of certain provisions of Order No. R5-2008-0154 (NPDES No. CA0079138) of the California Regional Water Quality Control Board, Central Valley Region (Regional Water Board) and other action or inaction of the Regional Water Board. The issues and a summary of the bases for the Petition follow. Concurrent with this Petition, Petitioner requests that the Petition be put into abeyance. Petitioner reserves the right to file a more detailed

statement of points and authorities in support of its Petition when the State Water Resources Control Board (State Water Board) considers the issues presented herein.[1]

The City owns and operates the Regional Wastewater Control Facility (RWCF) located at 2500 Navy Drive, San Joaquin County, Stockton, California. The RWCF provides tertiary level treatment of wastewater from the City of Stockton and unincorporated areas of San Joaquin County. The RWCF has an average dry weather permitted capacity of about 55 million gallons per day (mgd).

1. NAME AND ADDRESS OF PETITIONER:

City of Stockton
2500 Navy Drive
Stockton, CA 95206
Attn: Mr. Mark Madison, Director Municipal Utilities Department
Telephone: (209) 937-8700
Email: mark.madison@ci.stockton.ca.us

In addition, all materials in connection with this Petition should be provided to the City's special counsel at the following address:

Somach Simmons & Dunn
A Professional Corporation
Paul S. Simmons, Esquire
Theresa A. Dunham, Esquire
813 Sixth Street, Third Floor
Sacramento, CA 95814-2403
Telephone: (916) 446-7979
Facsimile: (916) 446-8199
Email: psimmons@somachlaw.com
Email: tdunham@somachlaw.com

2. THE SPECIFIC ACTION OR INACTION OF THE REGIONAL WATER BOARD WHICH THE STATE WATER BOARD IS REQUESTED TO REVIEW:

The City petitions the State Water Board to review the Regional Water Board's adoption of Order No. R5-2008-0154, Waste Discharge Requirements for the City of Stockton Regional

[1] The State Water Board's regulations require submission of a statement of points and authorities in support of a petition (Cal. Code Regs., tit. 23, § 2050(a)(7)), and this document is intended to serve as a preliminary memorandum. The City intends to request that the Petition be put into abeyance. Depending on other developments, the City may find it necessary to reactivate this Petition for review of certain permit provisions by the State Water Board. At that time, the City wishes to have the ability to augment the statement of points and authorities contained herein.

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Wastewater Control Facility (Permit), and action or inaction related thereto, as more fully described herein. A copy of the Permit (Order No. R5-2008-0154) is attached as Exhibit A.

The specific determinations, designations and requirements of the Permit that the City requests the State Water Board review are:

A. The adoption of water quality-based effluent limitations for electrical conductivity (EC) based on water quality objectives applicable to Brandt Bridge;

B. The adoption of a salinity reduction goal, which requires the City to demonstrate progress in meeting an EC goal based on an annual average of the City's water supply, plus an increment of 500 μmhos/cm; and,

C. The adoption of monitoring and reporting requirements that require the City to annually report on its progress towards meeting the salinity reduction goal contained in the permit.

3. THE DATE ON WHICH THE REGIONAL WATER BOARD ACTED OR REFUSED TO ACT:

The Regional Water Board adopted Order No. R5-2008-0154 on October 23, 2008. Unless otherwise provided, the City contends that all actions and inactions of the Regional Water Board challenged herein are not supported by adequate findings or evidence in the record and/or are inconsistent with applicable law.

4. STATEMENT OF REASONS WHY THE REGIONAL WATER BOARD'S ACTION WAS INAPPROPRIATE OR IMPROPER:

A. The Permit Improperly Includes an Effluent Limitation for EC

The Permit improperly includes an effluent limitation for EC. The effluent limitation is not necessary to achieve any applicable water quality standard. Compliance with the limitation will unduly burden the City as it is more stringent or onerous than required by federal law, and will or may require the City to expend limited public assets to comply with unlawful permit conditions.[2]

[2] See Order No. R5-2008-0154 at p. F-44 where the Regional Water Board incorporates information from the City's June 2004 Wastewater Treatment Feasibility Study, which estimates the capital cost of salinity removal from the wastewater (i.e., reverse osmosis) to cost an estimated $295 million, and the annual operation and maintenance costs to be estimated at an additional $21.6 million per year.

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(1) Factual and Regulatory Context for Application of the Effluent Limitation for EC

The Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Dec. 13, 2006) (Bay-Delta Plan) contains salinity water quality objectives for locations in the legal Sacramento-San Joaquin Delta. (Bay-Delta Plan at p. 10.) In 2006, the Bay-Delta Plan was amended to include the following statement: "Unless otherwise indicated, water quality objectives cited for a general area, such as for the southern Delta, are applicable for all locations in that general area and *compliance locations will be used to determine compliance with the cited objectives*." (Bay-Delta Plan at p. 10.) For the Southern Delta, the Bay-Delta Plan identifies water quality objectives of 700 µmhos/cm (April through August), and 1,000 µmhos/cm (September through March) for: San Joaquin River at Airport Way Bridge, Vernalis; and San Joaquin River at Brandt Bridge site; and Old River near Middle River; and Old River at Tracy Road Bridge. (Bay-Delta Plan at p. 13.) Of the four compliance locations, just two are on the San Joaquin River, both of which are upstream of the RWCF, and the Brandt Bridge site is the location closest to the point of discharge for the City's RWCF. (See Attachment 8 to comments submitted by the City of Stockton to James Marshall on the *Preliminary Draft Waste Discharge Requirements and Time Schedule Order for City of Stockton Regional Wastewater Control Facility* (July 18, 2008), Map of Bay-Delta Estuary Water Quality Monitoring Locations (Map of Bay-Delta).)

The federal Clean Water Act (CWA), and its implementing regulations, require effluent limitations where the discharge may cause, have the reasonable potential to cause, or contribute to an excursion above an applicable water quality standard. (33 U.S.C. §§ 1311(b)(1)(c), 1312(a); 40 C.F.R. § 122.44(d)(1)(i).) The water quality standard at issue here is the water quality objective identified for the Brandt Bridge site.

The City's point of discharge to the San Joaquin River is located near the Port of Stockton and the Stockton Deepwater Ship Channel. This location is over 6 miles downstream of the Brandt Bridge site. (Bay-Delta Plan at p. 13; see also Map of Bay-Delta.) The Brandt Bridge site is the furthest downstream compliance location for the south Delta area. (See Map of Bay-Delta.)

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Although effluent from the RWCF can move upstream due to tidal action, the City's allowed mixing zone and any influence of its discharge extends only 3.5 miles upstream of the RWCF. (Permit at p. F-20.)

The Permit includes final effluent limitations for EC that are based on the water quality objectives prescribed for Brandt Bridge contained in the Bay-Delta Plan. More specifically, the Permit includes a final effluent limitation for EC that requires the City to meet a monthly average effluent limitation of 700 µmhos/cm (1 April to 31 August), and 1,000 µmhos/cm (1 September to 31 March) if the City fails to develop and submit a Salinity Plan, and/or fails to timely implement an approved Salinity Plan. (Permit at p. 12.)

(2) The Effluent Limit for EC is Improper Because City's Effluent Does Not Cause or Contribute to Violation of an Applicable Water Quality Standard

As indicated previously, *compliance* with relevant EC water quality objectives must be determined at the compliance locations identified in the Bay-Delta Plan. (See Bay-Delta Plan at p. 10.) Thus, the Regional Water Board must determine if effluent from the City's RWCF has "reasonable potential" to cause or contribute to a violation of the water quality objective at the identified compliance locations. The reasonable potential analysis conducted by the Regional Water Board fails to comply with the Bay-Delta Plan because it does not consider reasonable potential at the Brandt Bridge site. (See Permit at F-41 – F-43.) Instead, the Regional Water Board applied the water quality objectives to the City's discharge location by claiming that it is in the "general area" of the Brandt Bridge compliance location. The Regional Water Board's application of the water quality objectives in this manner to determine reasonable potential is inconsistent with the Bay-Delta Plan because the Bay-Delta Plan specifically states that the "compliance locations will be used to determine compliance with the cited objectives." (Bay-Delta Plan at p. 10.) In other words, the Regional Water Board must determine if the City's discharge will cause or contribute, or has reasonable potential to cause or contribute, to a violation of the water quality objectives as measured at Brandt Bridge. In this case, the City's discharge does not cause or contribute to a violation of the applicable water quality objectives at the Brandt Bridge site. Because there is no reasonable potential, there is no basis for water

quality-based effluent limitations for EC. Thus, the EC effluent limitations are improper and unlawful.[3]

(3) In the Alternative, the Permit Improperly Finds That Water Quality Objectives Prescribed for Brandt Bridge Apply to the San Joaquin River at or Near the Discharge Location for the City's RWCF

In the alternative, if reasonable potential to cause or contribute to exceedance of water quality objectives is to be determined in the "general area" of the Brandt Bridge site, the Permit improperly finds that the City's point of discharge for the RWCF is in the "general area" of Brandt Bridge. It further finds improperly that the water quality objectives prescribed for Brandt Bridge apply to the San Joaquin River at or near the discharge location for the RWCF because it is in the "general area." (Permit at p. F-42.) The Regional Water Board relied on general language in the Bay-Delta Plan to apply the Southern Delta water quality objectives to the City's point of discharge. (See Permit at pp. F-41 - F-42.) However, the Regional Water Board misinterpreted and misapplied the general language.

The City's point of discharge is not in the general area of the Brandt Bridge site or the Southern Delta locations specified in the Bay-Delta Plan. As indicated previously, the City's point of discharge is over 6 miles downstream and its effects do not extend upwards to Brandt Bridge. It is also not in a "general area" associated with the four compliance locations, two of which are not even on the San Joaquin River. Thus, the City's point of discharge is not in a relevant general area and the water quality objectives do not apply.

In addition, the Administrative Record for the 2006 amendments to the Bay-Delta Plan indicates that the language at issue here was added as a "clarification." (See Plan Amendment Report, Appendix 1 to the Bay-Delta Plan at p. 15.)[4] However, if this "clarification" were to extend the application of water quality objectives to areas of the Delta where such objectives did not previously apply, this would be an improper adoption of a water quality objective.

[3] At minimum, adoption of an effluent limitation for EC would require compliance with Water Code section 13241. (Wat. Code, § 13263(a).) The Permit does not purport to have considered the factors under Water Code section 13241.

[4] Pursuant to title 23 of the California Code of Regulations, section 648.3, the City hereby incorporates by reference the Administrative Record for the Bay-Delta Plan. The incorporation by reference at this time is proper as the Regional Water Board relies on the 2006 Plan to apply the objectives in question.

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When adopting or modifying water quality objectives, the State Water Board and the Regional Water Boards are required to comply with Water Code section 13241, which requires consideration of certain factors that include in part: consideration of beneficial uses, water quality conditions that could reasonably be achieved and economics. (Wat. Code, §§ 13170, 13241; see also *In the Matter of the Petitions of Napa Sanitation District, et al., etc.*, Order WQ 2001-16 (Dec. 5, 2001) at p. 24.) There is no evidence in the State Water Board's Administrative Record for the Bay-Delta Plan to suggest that the State Water Board considered the Water Code section 13241 factors related to extending the application of these objectives to the San Joaquin River 6 miles downstream of Brandt Bridge. Likewise, there is no evidence in the Regional Water Board's Permit record to suggest that the Regional Water Board considered the Water Code section 13241 factors as it applied the Brandt Bridge water quality objectives to the City's point of discharge for the first time. (See Order No. R5-2002-0083 at p. 14, where the Regional Water Board finds that the RWCF is downstream of the south Delta.) Thus, the Regional Water Board's action to extend application of the Brandt Bridge water quality objectives to the San Joaquin River at or near the RWCF's point of discharge is not supported by substantial evidence and is unlawful. There is no evidence in the Permit record to suggest that water quality objectives for Brandt Bridge apply to the City's point of discharge. Because application of the water quality objectives is unlawful, water quality-based effluent limitations based on the water quality objectives are also unlawful.

(4) The Permit Improperly Includes Requirements to Develop a Salinity Plan

As part of the effluent limit for EC, the Permit improperly requires the City to develop a Salinity Plan. (Permit at p. 12.) If the City fails to develop and submit, and timely implement, a Salinity Plan, the City is required to meet effluent limits based on water quality objectives for Brandt Bridge. Because, as described above, no effluent limitation is justified, the requirement to develop, submit and implement a Salinity Plan as part of the effluent limitation is also improper.

B. The Permit Improperly Includes a Salinity Reduction Goal for EC

The Permit improperly includes a Salinity Reduction Goal, which requires the City to demonstrate reasonable progress in reducing salinity in its discharge based on the annual average

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of the maximum weighted average EC of the City's water supply, plus an increment of 500 μmhos/cm. (Permit at p. 26.) The Permit states that 500 μmhos/cm is the typical amount of mineral pick-up for consumptive use, and that it is a reasonable intermediate goal that can be achieved through proper implementation of a pollution prevention plan. (Permit at pp. 26, F-77.) There is no evidence in the Permit record to support that 500 μmhos/cm is typical for consumptive use or that it is a reasonable goal that the City can achieve through implementation of its pollution prevention plan. To the contrary, the City has provided evidence indicating that 500 μmhos/cm is not an appropriate measure for mineral pick-up from municipal use as it does not account for or consider salinity inputs from water softeners, industrial uses or commercial uses that are discharged to the City's RWCF. (See Comments from City of Stockton to James Marshall, *Tentative Waste Discharge Requirements and Time Schedule Order for City of Stockton Regional Wastewater Control Facility* (Sept. 22, 2008) at p. 5.) Because there is no evidence to support the Salinity Reduction Goal or the City's ability to achieve the goal, the goal is improper.

C. The Permit Improperly Includes Monitoring and Reporting Requirements for Demonstrating Progress Towards Meeting a Salinity Reduction Goal

As part of its monitoring and reporting requirements, the Permit improperly includes a reporting requirement that requires the City to submit annual progress reports indicating if the City is on task to meet the salinity goal specified in the Permit. (Permit at p. E-18.) As explained previously, the Salinity Reduction Goal for EC is unsupported and unlawful. Further, the Regional Water Board relies on Water Code sections 13267 and 13383 to require technical and monitoring reports. To the extent that the Regional Water Board relies on Water Code section 13267, the Regional Water Board is required to ensure that the burden of preparing the report, including costs, bears a reasonable relationship to the needs and benefits to be obtained from the report. (Wat. Code, § 13267(b).) Because the Salinity Reduction Goal is impmroper, the monitoring and reporting requirement for an annual progress report is also unlawful, and the burden for preparing the report fails to bear a reasonable relationship to the needs and benefits.

5. THE MANNER IN WHICH THE PETITIONER IS AGGRIEVED:

The City is aggrieved by Permit conditions and limitations, which are more stringent or onerous than required by or provided for under current law. The City will or may be required to expend its limited public assets to comply with inappropriate or unlawful Permit conditions, as well as for monitoring and special studies to determine compliance with inappropriate and unlawful Permit limits. Given that the City's resources are limited, it is aggrieved when it is forced to use resources to comply with requirements that are arbitrary, unnecessary, unlawful and not required by law. This harm is exacerbated by the fact that these additional efforts are being required to protect, or are not likely to provide for measurable betterment to, the water quality of the receiving water. The City is further aggrieved by the inclusion of each of the unlawful and excessive Permit conditions with which it cannot now, or in the immediate future, comply, because it may be subject to penalties and citizen suits in accordance with the CWA and the California Water Code.

6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL WATER BOARDS REQUESTED:

Based on the foregoing, the City requests that the State Water Board modify, or order the Regional Water Board to modify, Order No. R5-2008-0154 with direction for revisions, as follows:

A. Delete the water quality-based effluent limitations for EC that are based on water quality objectives applied to Brandt Bridge, which are found in Effluent Limitations and Discharge Specifications IV.A.1.j.;

B. Delete the Permit requirements to develop and implement a Salinity Plan, which are found in Effluent Limitations and Discharge Specifications IV.A.1.j. and in Provisions VI.C.3.c.;

C. Delete the Salinity Reduction Goal, which requires the City to demonstrate progress in meeting an EC goal based on an annual average of the City's water supply, plus an increment of 500 μmhos/cm, which is found in Provisions VI.C.3.b.;

D. Delete the monitoring and reporting requirements that require the City to annually report on its progress towards meeting the Salinity Reduction Goal, which are found in Attachment E, Monitoring and Reporting Program X.D.1.; and,

E. Make any necessary revisions consistent with the above terms and provisions of this Petition.

7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THIS PETITION:

The City's preliminary statement of points and authorities is set forth in Section 4 above. The City reserves the right to supplement this statement.

8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE APPROPRIATE REGIONAL WATER BOARD:

A true and correct copy of the Petition was mailed by First Class mail on November 21, 2008, to the Regional Water Board at the following address:

Pamela Creedon, Executive Officer
California Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

9. A STATEMENT THAT THE SUBSTANTIVE ISSUES OR OBJECTIONS RAISED IN THE PETITION WERE RAISED BEFORE THE REGIONAL WATER BOARD:

The substantive issues and objections in this Petition were raised before the Regional Water Board at the public hearing on October 23, 2008, and were included in written comments submitted on July 18, 2008 and on September 22, 2008.

SOMACH, SIMMONS & DUNN
A Professional Corporation

Dated: November 21, 2008

By _____
Paul S. Simmons
Attorneys for Petitioner
CITY OF STOCKTON

SOMACH SIMMONS & DUNN
A Professional Corporation

PROOF OF SERVICE

I am employed in the County of Sacramento; my business address is 813 Sixth Street, Third Floor, Sacramento, California; I am over the age of 18 years and not a party to the foregoing action.

On November 21, 2008, I served the following document(s)

CITY OF STOCKTON'S PETITION FOR REVIEW; PRELIMINARY STATEMENT IN SUPPORT OF PETITION (Wat. Code, § 13320)

XX (by mail) on all parties in said action, in accordance with Code of Civil Procedure § 1013a(3), by placing a true copy thereof enclosed in a sealed envelope, with postage fully prepaid thereon, in the designated area for outgoing mail, addressed as set forth below:

Pamela Creedon, Executive Officer California Regional Water Quality Control Board, Central Valley Region 11020 Sun Center Drive, #200 Rancho Cordova, CA 95670	

I declare under penalty of perjury that the foregoing is true and correct. Executed on November 21, 2008, at Sacramento, California.

Crystal Rivera

SOMACH SIMMONS & DUNN
A Professional Corporation

CALIFO . .A REGIONAL WATER QUALITY CONTROL BOARD

CENTRAL VALLEY REGION

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Phone (916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

ORDER NO. R5-2008-0154
NPDES NO. CA0079138

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF STOCKTON REGIONAL WASTEWATER CONTROL FACILITY SAN JOAQUIN COUNTY

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	City of Stockton
Name of Facility	Regional Wastewater Control Facility
Facility Address	2500 Navy Drive
	Stockton, CA 95206
	San Joaquin
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the City of Stockton Regional Wastewater Control Facility from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Tertiary treated municipal wastewater	37° 56' 15" N	121° 20' 5" W	San Joaquin River

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**23 October 2008**
This Order shall become effective on:	**12 December 2008**
This Order shall expire on:	**1 October 2013**
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	**180 days prior to the Order expiration date**

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **23 October 2008.**

Original signed by Pamela C. Creedon

PAMELA C. CREEDON, Executive Officer

EXHIBIT A

Table of Contents

List of Tables

List of Attachments

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	City of Stockton
Name of Facility	Regional Wastewater Control Facility
Facility Address	2500 Navy Drive
	Stockton, CA 95206
	San Joaquin County
Facility Contact, Title, and Phone	Mark Madison, Director, (209) 937-8750
Mailing Address	SAME
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	55 million gallons per day (mgd)

II. FINDINGS

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Regional Water Board), finds:

A. **Background.** The City of Stockton (hereinafter Discharger) is currently discharging pursuant to Order No. R5-2002-0083 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0079138. The Discharger submitted a Report of Waste Discharge, dated 29 September 2006, and applied for a NPDES permit renewal to discharge up to 55 million gallons per day (mgd) of treated wastewater from the City of Stockton Regional Wastewater Control Facility, hereinafter Facility. The application was deemed complete on 28 February 2007.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. **Facility Description.** The Discharger owns and operates the Stockton Regional Wastewater Control Facility. The Facility provides primary treatment consisting of screening, grit removal, and primary sedimentation, and secondary treatment consisting of high rate trickling filters and secondary clarifiers. The secondary treated effluent is piped under the San Joaquin River to the tertiary level treatment facility, which consists of facultative ponds, engineered wetlands, two nitrifying biotowers, dissolved air flotation, mixed-media filters, and chlorination/dechlorination facilities. Several of the ponds are operated in a stand-by mode of operation as necessary, to achieve improved effluent quality by decreasing solids loading on the downstream treatment process, and by maintaining stable ammonia loading to the nitrifying biotowers.

Sludge is removed from the primary and secondary sedimentation processes to gravity thickeners for preliminary water removal, and then pumped to anaerobic digesters. After digestion, the treated sludge is pumped to a lagoon where anaerobic digestion continues. A dredge is used to pump the concentrated material from the bottom of the lagoon to a belt filter press and dewatered biosolids are removed by a private contractor off-site for agricultural reuse.

Wastewater is discharged from Discharge Point No. 001 (see table on cover page) to the San Joaquin River, a water of the United States, within the Sacramento-San Joaquin Delta. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. **Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

D. **Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E, G, and H are also incorporated into this Order.

E. **California Environmental Quality Act (CEQA).** Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

F. **Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (CFR)[1] require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. **Water Quality-based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement that are necessary to achieve water quality standards. The Regional Water

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Board has considered the factors listed in CWC Section 13241 in establishing these requirements. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements, is discussed in the Fact Sheet.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in 40 CFR section 122.44(d)(1)(vi).

H. **Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan, Fourth Edition (Revised February 2007), for the Sacramento and San Joaquin River Basins* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to San Joaquin River are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	**San Joaquin River**	Existing: Municipal and domestic supply (MUN); agricultural supply (AGR) including both irrigation and stock watering; industrial process supply (PRO); industrial service supply (IND); water contact recreation (REC-1); non-contact water recreation (REC-2); migration of aquatic organisms (MIGR); warm freshwater aquatic habitat (WARM); cold freshwater aquatic habitat (COLD); spawning, reproduction, and/or early development (SPWN); wildlife habitat (WILD); and navigation (NAV).

The Basin Plan includes a list of Water Quality Limited Segments (WQLSs), which are defined as "*...those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 CFR 130, et seq.).*" The Basin Plan also states, "*Additional treatment beyond minimum federal standards will be imposed on dischargers to WQLSs. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment.*" The Delta is divided into multiple WQLSs. The Facility discharges directly into the southern portion and just upstream of the Stockton Deep Water Ship

Channel (DWSC). The listing for both WQLSs are applicable to the discharge. The WQLSs are 303(d) listed for: chloropyrifos, DDT, diazinon, dioxin, EC, exotic species, furan compounds, group A pesticides, mercury, pathogens, PCBs, and unknown toxicity. Effluent Limitations for EC, mercury, pathogens, and toxicity are included in this Order.

A total maximum daily load (TMDL) for oxygen demanding substances in the DWSC was adopted by the Regional Water Board on 27 January 2005 (Resolution No. R5-2005-0005). The TMDL was approved by the State Water Board on 16 November 2005 and approved by the USEPA on 27 February 2007. Wasteload allocations for oxygen demanding substances, specifically ammonia, carbonaceous biochemical oxygen demand ($CBOD_5$), and dissolved oxygen (DO), have not been apportioned; however, this Order contains effluent limits for these constituents until the Regional Water Board establishes final effluent limitations.

Requirements of this Order implement the Basin Plan.

I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on 22 December 1992, and later amended it on 4 May 1995 and 9 November 1999. About forty criteria in the NTR applied in California. On 18 May 2000 USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on 13 February 2001. These rules contain water quality criteria for priority pollutants.

J. **State Implementation Policy.** On 2 March 2000 the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on 28 April 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on 18 May 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on 24 February 2005 that became effective on 13 July 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

K. **Compliance Schedules and Interim Requirements.** In general, an NPDES permit must include final effluent limitations that are consistent with CWA section 301 and with 40 CFR 122.44(d). There are exceptions to this general rule. The State Water Board has concluded that where the Regional Water Board's Basin Plan allows for schedules of compliance and the Regional Water Board is newly interpreting a narrative standard, it may include schedules of compliance in the permit to meet effluent limits that implement a narrative standard. See In the Matter of Waste Discharge Requirements for Avon Refinery (State Water Board Order WQ 2001-06 at pp. 53-55). See also Communities for a Better Environment et al. v. State Water Resources Control Board, 34 Cal.Rptr.3d 396, 410 (2005). The Basin Plan for the Sacramento and San Joaquin Rivers includes a provision that authorizes the use of compliance schedules in NPDES

permits for water quality objectives that are adopted after the date of adoption of the Basin Plan, which was 25 September 1995 (see Basin Plan at page IV-16). Consistent with the State Water Board's Order in the CBE matter, the Regional Water Board has the discretion to include compliance schedules in NPDES permits when it is including an effluent limitation that is a "new interpretation" of a narrative water quality objective. This conclusion is also consistent with the USEPA policies and administrative decisions. See, e.g., Whole Effluent Toxicity (WET) Control Policy. The Regional Water Board, however, is not required to include a schedule of compliance, but may issue a Time Schedule Order pursuant to Water Code section 13300 or a Cease and Desist Order pursuant to Water Code section 13301 where it finds that the discharger is violating or threatening to violate the permit. The Regional Water Board will consider the merits of each case in determining whether it is appropriate to include a compliance schedule in a permit, and, consistent with the Basin Plan, should consider feasibility of achieving compliance, and must impose a schedule that is as short as practicable to achieve compliance with the objectives, criteria, or effluent limit based on the objective or criteria.

For CTR constituents, Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or 18 May 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules and interim effluent limitations and/or discharge specifications. A detailed discussion is included in the Fact Sheet.

L. **Alaska Rule.** On 30 March 2000 USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR §131.21; 65 Fed. Reg. 24641 (27 April 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after 30 May 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by 30 May 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The applicable technology-based effluent limitations consist of restrictions on $CBOD_5$ and total suspended solids (TSS). The applicable water quality-based effluent limitations consist of restrictions on aluminum, ammonia, bis(2-ethylhexyl)phthalate, chlorodibromomethane, cyanide, dichlorobromomethane, manganese, molybdenum, nitrate, and pathogens. This Order's technology-based pollutant restrictions implement

the minimum, applicable federal technology-based requirements. In addition, this Order includes effluent limitations for $CBOD_5$, TSS, and pathogens to meet numeric objectives or protect beneficial uses. The rationale for including these limitations is explained in the Fact Sheet (Attachment F). In addition, the Regional Water Board has considered the factors in Water Code section 13241 in establishing these requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on 1 May 2001. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to 30 May 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to 30 May 2000, but not approved by USEPA before that date, are nonetheless "*applicable water quality standards for purposes of the [Clean Water] Act*" pursuant to 40 CFR section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

N. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 is consistent with the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

O. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in detail in the Fact Sheet (Attachment F) this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

P. **Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act

(16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. **Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and state requirements. This Monitoring and Reporting Program is provided in Attachment E.

R. **Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

The Regional Water Board has determined pollution prevention is necessary to achieve compliance with water quality objectives for total dissolved solids (for salinity), and mercury. In accordance with Water Code section 13263.3(d)(C), this Order requires the Discharger to develop pollution prevention plans for these pollutants.

S. **Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.C., V.B, and VI.C.4.a. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

T. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

U. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that Waste Discahrge Requirements Order No. R5-2002-0083 and Cease and Desist Order No. R5-2002-0084 are rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. Discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.

B. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions I.G. and I.H. (Attachment D).

C. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.

D. The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001

1. Final Effluent Limitations – Discharge Point No. 001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP (Attachment E):

a. The Discharger shall maintain compliance with the effluent limitations specified in Table 6:

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Aluminum, Total Recoverable	µg/L	311		750		
Ammonia, Total (as N)	mg/L	2	--	5	--	--
	lbs/day[1]	917	--	2294	--	--
Bis(2-ethylhexyl)phthalate	µg/L	1.8	--	3.6	--	--

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Chlorodibromomethane	µg/L	5.0	--	16	--	--
Total Coliform Organisms	MPN/100ml	--	--	--	--	240
Cyanide, Total Recoverable	µg/L	4.1	--	9.0	--	--
Dichlorobromomethane	µg/L	6.8	--	20	--	--
Manganese, Total Recoverable	µg/L		--	286	--	--
Molybdenum, Total Recoverable	µg/L		--	13	--	--
Nitrate plus Nitrite (as N)	mg/L	40	--	--	--	--
pH	s.u.	--	--	--	6.5	8.5
Total Suspended Solids (TSS)	mg/L	10	15	20	--	--
	lbs/day[1]	4,590	6,885	9,180	--	--
5-Day CBOD @ 20 °C	mg/L	10	15	20	--	--
	lbs/day[1]	4,590	6,885	9,180	--	--

[1] Mass-based effluent limitations are based on a design flow of 55 mgd.

b. **Percent Removal:** The average monthly percent removal of CBOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

c. **Acute Whole Effluent Toxicity.** Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

   i. 70%, minimum for any one bioassay; and
   ii. 90%, median for any three consecutive bioassays.

d. **Temperature.** The maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20°F.

e. **Total Residual Chlorine.** Effluent total residual chlorine shall not exceed:

   i. 0.01 mg/L, as a 4-day average; and
   ii. 0.02 mg/L, as a 1-hour average.

f. **Total Coliform Organisms.** Effluent total coliform organisms shall not exceed:

   i. 2.2 most probable number (MPN) per 100 mL, as a 7-day median; and
   ii. 23 MPN/100 mL, more than once in any 30-day period.

g. **Average Dry Weather Flow.** The Average Dry Weather Flow shall not exceed 55 mgd.

h. **Dissolved Oxygen.** The daily average effluent dissolved oxygen concentration shall not be less than 6.0 mg/L from 1 September through 30 November and 5.0 mg/L throughout the remainder of the year.

i. **Aluminum.** The discharge of total recoverable aluminum shall not exceed a concentration of 200 µg/L as an annual average.

j. **Electrical Conductivity.**

i. The electrical conductivity in the discharge shall not exceed an annual average of 1,300 µmhos/cm;

ii. If the Discharger fails to comply with the requirements in 1) or 2), below, the electrical conductivity in the discharge shall not exceed a monthly average of 700 µmhos/cm (1 April to 31 August), and 1000 µmhos/cm (1 September to 31 March):

1) The Discharger shall develop and submit a Salinity Plan as specified in Provision VI.C.3.c; and

2) The Discharger shall timely implement the Salinity Plan upon the Regional Water Board's approval. The proposed Salinity Plan will be circulated for no less than 30 days of public comment prior to the Regional Water Board's consideration of the Salinity Plan. The Regional Water Board may revise the Salinity Plan prior to final approval.

Upon determination by the Regional Water Board that the Discharger has materially failed to comply with the approved Salinity Plan due to circumstances within its control, the monthly average effluent limitations for electrical conductivity specified in j.ii., above, shall become effective immediately.

k. **Chronic Whole Effluent Toxicity.** There shall be no chronic toxicity in the effluent discharge.

2. Interim Effluent Limitations

a. **Mercury.** The total annual mass discharge of total mercury shall not exceed 0.92 pounds. This interim performance-based limitation shall be in effect until the Regional Water Board establishes final effluent limitations after adoption of the Sacramento-San Joaquin Delta Methylmercury TMDL.

B. Land Discharge Specifications

[Not Applicable]

C. Reclamation Specifications

1. Offsite use of reclaimed water covered by this Order shall be limited to dust control and compaction by building contractors, and street sweeping. Additional offsite specific reclamation uses may be approved by the Executive Officer with the submission of a written report demonstrating, to the satisfaction of the Executive Officer, that the uses will be in compliance with the terms of the Order.

2. Reclaimed water shall be chlorinated secondary treated effluent. For disinfection, the median number of total coliform organisms in the water shall not exceed 23 MPN/100 ml, as determined from the bacteriological results of the last seven days for which analyses have been completed, and the number of coliform organisms shall not exceed 240 MPN/100 ml in any two consecutive samples.

3. Reclaimed water shall meet the criteria contained in Title 22, Division 4, CCR (section 60301, et seq.).

4. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.

5. Controls on use for construction shall follow Guideline for Use of Reclaimed Water For Construction Purposes, as follows:

   a. Truck drivers should be instructed as to the reclamation specifications and potential health hazards involved with reuse of wastewater.
   b. Tank trucks and other equipment, which come into contact with reclaimed water, should be clearly identified with warning signs/placards.
   c. Tank trucks used for reclaimed water should be thoroughly cleaned of septage or other contaminants prior to reuse.
   d. Use of reclaimed water should not create any odor or nuisance.
   e. Ponding or runoff of reclaimed water should not occur.
   f. Aerosol formation during uses involving spraying should be minimized.
   g. Reclaimed water should be applied so as to prevent public contact with water.
   h. Reclaimed water must not be introduced into any permanent piping system and no connection shall be made between the tank truck and any part of a domestic water system.
   i. Tank trucks should be cleaned and disinfected after the project is completed.
   j. Tank trucks used to transport reclaimed water shall not be used to carry domestic water.

6. Treated wastewater discharged for reclamation for purposes not specified in this section must be regulated under separate waste discharge requirements and must meet the requirements of California Code of Regulations (CCR), Title 22.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the San Joaquin River:

1. **Bacteria.** The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mL, nor more than ten percent of the total number of fecal coliform samples taken during any 30-day period to exceed 400 MPN/100 mL

2. **Biostimulatory Substances.** Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.

3. **Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.

4. **Color.** Discoloration that causes nuisance or adversely affects beneficial uses.

5. **Dissolved Oxygen:**

   a. The dissolved oxygen concentration to be reduced below 6.0 mg/L any time from 1 September through 30 November.
   b. The dissolved oxygen concentration to be reduced below 5.0 mg/L at any time from 1 December through 31 August.

6. **Floating Material.** Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.

7. **Oil and Grease.** Oils, greases, waxes, or other materials to be present in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.

8. **pH.** The pH to be depressed below 6.5, raised above 8.5, nor changed by more than 0.5 units. A 1-month averaging period may be applied when calculating the pH change of 0.5.

9. **Pesticides:**

   a. Pesticides to be present, individually or in combination, in concentrations that adversely affect beneficial uses;
   b. Pesticides to be present in bottom sediments or aquatic life in concentrations that adversely affect beneficial uses;

c. Total identifiable persistent chlorinated hydrocarbon pesticides to be present in the water column at concentrations detectable within the accuracy of analytical methods approved by USEPA or the Executive Officer;
d. Pesticide concentrations to exceed those allowable by applicable antidegradation policies (see State Water Board Resolution No. 68-16 and 40 CFR §131.12.).
e. Pesticide concentrations to exceed the lowest levels technically and economically achievable;
f. Pesticides to be present in concentration in excess of the maximum contaminant levels set forth in CCR, Title 22, Division 4, Chapter 15; and
g. Thiobencarb to be present in excess of 1.0 µg/L.

10. **Radioactivity**:

    a. Radionuclides to be present in concentrations that are harmful to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
    b. Radionuclides to be present in excess of the maximum contaminant levels specified in Table 64443 (MCL Radioactivity) of Section 64443 of Title 22 of the CCR.

11. **Suspended Sediments**. The suspended sediment load and suspended sediment discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

12. **Settleable Substances**. Substances to be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

13. **Suspended Material**. Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses.

14. **Taste and Odors**. Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.

15. **Temperature**. The Thermal Plan is applicable to this discharge. The Thermal Plan requires that the discharge shall not cause the following in the San Joaquin River:

    a. The creation of a zone, defined by water temperatures of more than 1°F above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of the river channel at any point; and

    b. A surface water temperature rise greater than 4°F above the natural temperature of the receiving water at any time or place;

16. **Toxicity**. Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

17. **Turbidity**. The turbidity to increase as follows:

    a. More than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 0 and 5 NTUs.
    b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
    c. More than 10 NTU where natural turbidity is between 50 and 100 NTUs.
    d. More than 10 percent where natural turbidity is greater than 100 NTUs.

    When wastewater is treated to a tertiary level (including coagulation) or equivalent, a 1-month averaging period may be used when determining compliance with this Receiving Surface Water Limitation for turbidity.

B. Groundwater Limitations

1. Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not cause or contribute to, in combination with other sources of the waste constituents, groundwater within influence of the Facility to contain:

    a. Taste or odor-producing constituents, toxic substances, or any other constituents, in concentrations that cause nuisance or adversely affect beneficial uses;

    b. Waste constituent concentrations in excess of water quality objectives or background water quality, whichever is greater; and

    c. Waste constituent concentrations in excess of the concentrations specified below or background water quality, whichever is greater:

        i. Fecal coliform organisms median of 2.2 MPN/100 mL over any seven-day period; and

        ii. Nitrate plus Nitrite as nitrogen of 10 mg/L.

2. Groundwater Limitations B.1.b and c become effective upon completion of the requirements specified in Provision VI.C.2.c of this Order.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. The Discharger shall comply with the following provisions:

   a. If the Discharger's wastewater treatment plant is publicly owned or subject to regulation by California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to Title 23, CCR, Division 3, Chapter 26.

   b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

      i. violation of any term or condition contained in this Order;

      ii. obtaining this Order by misrepresentation or by failing to disclose fully all relevant facts;

      iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and

      iv. a material change in the character, location, or volume of discharge.

      The causes for modification include:

      - *New regulations.* New regulations have been promulgated under Section 405(d) of the Clean Water Act, or the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.

      - *Land application plans.* When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.

      - *Change in sludge use or disposal practice.* Under 40 CFR 122.62(a)(1), a change in the Discharger's sludge use or disposal practice is a cause for modification of the permit. It is cause for revocation and reissuance if the Discharger requests or agrees.

      The Regional Water Board may review and revise this Order at any time upon application of any affected person or the Regional Water Board's own motion.

   c. If a toxic effluent standard or prohibition (including any scheduled compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the CWA, or amendments thereto, for a toxic pollutant that is present in

the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Regional Water Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition.

The Discharger shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions, even if this Order has not yet been modified.

d. This Order shall be modified, or alternately revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:

   i. contains different conditions or is otherwise more stringent than any effluent limitation in the Order; or

   ii. controls any pollutant limited in the Order.

   The Order, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

e. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.

f. The Discharger shall take all reasonable steps to minimize any adverse effects to waters of the State or users of those waters resulting from any discharge or sludge use or disposal in violation of this Order. Reasonable steps shall include such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge or sludge use or disposal, and adequate public notification to downstream water agencies or others who might contact the non-complying discharge.

g. The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by USEPA under Section 307 of the CWA, or amendment thereto, for any discharge to the municipal system.

h. The discharge of any radiological, chemical or biological warfare agent or high-level, radiological waste is prohibited.

i. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel. Key operating personnel shall be familiar with its content.

j. Safeguard to electric power failure:

   i. The Discharger shall provide safeguards to assure that, should there be reduction, loss, or failure of electric power, the discharge shall comply with the terms and conditions of this Order.

ii. Upon written request by the Regional Water Board the Discharger shall submit a written description of safeguards. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past 5 years on effluent quality and on the capability of the Discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Water Board.

iii. Should the treatment works not include safeguards against reduction, loss, or failure of electric power, or should the Regional Water Board not approve the existing safeguards, the Discharger shall, within 90 days of having been advised in writing by the Regional Water Board that the existing safeguards are inadequate, provide to the Regional Water Board and USEPA a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the Discharger shall comply with the terms and conditions of this Order. The schedule of compliance shall, upon approval of the Regional Water Board, become a condition of this Order.

k. The Discharger, upon written request of the Regional Water Board, shall file with the Board a technical report on its preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. This report may be combined with that required under Regional Water Board Standard Provision VI.A.2.m.

The technical report shall:

i. Identify the possible sources of spills, leaks, untreated waste by-pass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.

ii. Evaluate the effectiveness of present facilities and procedures and state when they became operational.

iii. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

The Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions shall be incorporated as part of this Order, upon notice to the Discharger.

l. A publicly owned treatment works (POTW) whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment and disposal facilities. The projections shall be made in January, based on the last 3 years' average dry